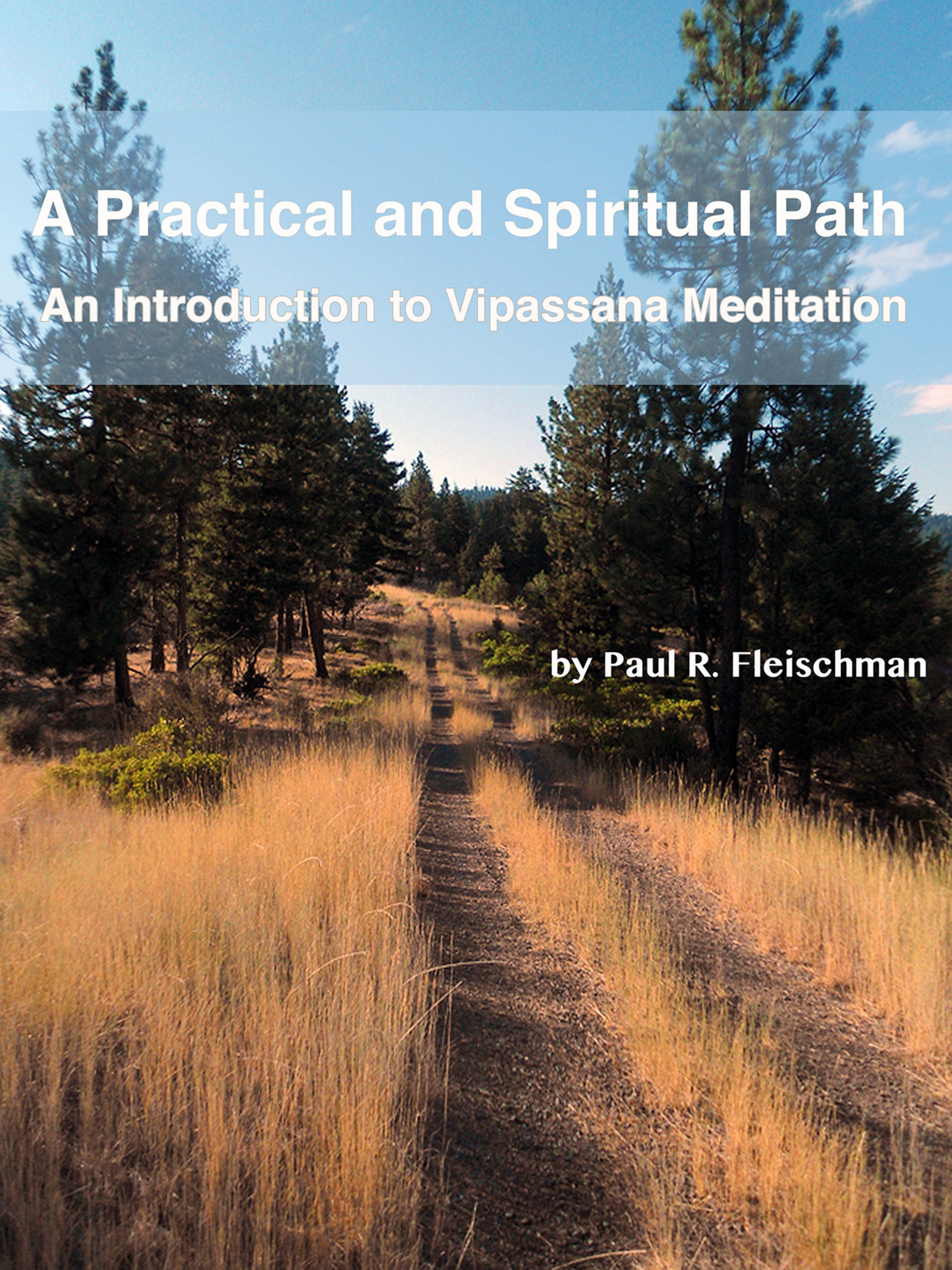
A Practical and Spiritual Path

An Introduction to Vipassana Meditation



by Paul R. Fleischman

September 9, 2015

A PRACTICAL AND SPIRITUAL PATH:
AN INTRODUCTION TO VIPASSANA MEDITATION

BASED UPON THE YALE AND NEW YORK UNIVERSITY TALKS OF JANUARY19TH AND FEBRUARY 15TH 2015

Paul R. Fleischman, M.D.

dr.paulrf@gmail.com

For more information about Vipassana courses and schedules go to
http://www.dhamma.org

Introduction

During the years that I have been giving talks on Vipassana meditation, the audiences have changed radically. Only a few decades ago, meditation was relatively exotic. Today, it has been the subject of thousands of studies and articles in the Western world, and is practiced to some degree by millions of people. Audiences have more scientific information, beliefs, assumptions, misinformation, enthusiasm, commercial interest, or psychological over-expectations and fears. Each lecture requires an adjustment to a different style of listener. In the winter of 2014-2015, I found myself scheduled to give lectures and talks at a number of varying venues.

I developed three goals for each talk: describing to potential new students the meditation practice and the courses in which it is taught; making the presentation compatible with contemporary science while preserving Vipassana's historical authenticity; addressing specific audience agendas.

The winter of 2014-2015 was ferocious. We had serial snowstorms banging down upon us, and months of temperatures hovering around zero Fahrenheit, with no thaw, and therefore with continuous accumulation of white, frozen piles. Many mornings the wind chills were well below 0 Fahrenheit, several days as low as minus 20. Every day was a challenge to dress properly in order to survive the hour walking the dog. Icicles hung in glittering arrays from gutters and rooflines. The historic nature of the freeze – the coldest February since temperature records started in 1836 -- added to its subtext of threat, as an aberration imposed by global climate change.

Under these conditions, the series of Vipassana talks was possible only due to devoted teams of volunteers, too numerous to be mentioned by name.

Guided by the strong determination of Dr. Aruna Pawashe, a molecular biologist teaching at Yale, and with the co-sponsorship of Dr. David McCormick, Professor of Neurobiology and Psychology at Yale, I was invited to give a talk at the Mary Harkness Auditorium of the Sterling Hall of Medicine, on Martin Luther King Day, January 19th, 2015. This talk was important to me personally because it felt like a homecoming to buildings that had been part of my psychiatric education many years ago. The audience filled the hall.

About a month later, on an unbearably cold night in New York City, February 15th, 2015, I gave a talk to a packed lecture hall at New York University's Kimmel Center's Grand Hall on Washington Square, an opportunity created against the odds by Jeremy Daniel Frey-Weeden, a student in the New York University Nursing School, and his fellow New York University student, and the leader of the World Faith Club, Hediya Sizar. In addition, the same week, in New York, Nyi Aye arranged for a talk in the Dag Hammarskjold Auditorium at the United Nations, and Manish Chopra arranged for a talk at the international consulting firm of McKinsey and Company.

These talks were challenging and stirring for me. The eyes of approximately one thousand people focused upon the speaker, hoping to hear something that would help them through the difficulties of their life, emblemized by the fortress winter. Their eyes called me to honesty and clarity about Vipassana's strengths and limits. Each audience listened at a slightly different angle, and within a different context.

On my mind as I spoke were the questions and concerns that I thought were animating the listeners in each particular audience. For the Yale talk, which was also co-sponsored by the Department of Integrative Medicine, many audience members were already practicing mindfulness-derived meditation-like techniques, and they must have been wondering whether Vipassana could treat medical illnesses. In the business atmosphere at McKinsey, there was some concern with the perceived inefficiency of learning meditation in a ten-day retreat, when apparently similar techniques had already been taught to some of them in brief workshops. I had received emails in advance from a member of the NYU neuro-psychology faculty, who attacked Vipassana as an outmoded competitor to his brand of Tibetan-derived practices. In addition, there was momentum in university environments to claim and promote any kind of meditation as medically valuable brain training, a viewpoint that had been championed by prominent Buddhists in the *New York Times* and elsewhere. At both Yale and the UN, East Asian-born audience members listened to me from the standpoint of their Buddhist religious upbringing, either hoping or fearing that I might reproduce the belief systems that they had either accepted or rebelled against in their childhood. Among non-medical faculty, there was concern that Vipassana might be religious and unacceptable to non-sectarian minds. Finally, from within the Vipassana community itself, as I experienced it from my email inbox, there was a rough debate about whether Vipassana was an ancient tradition or copyrighted private property, and meditators' speech was being scrutinized for loyalty.

I have often imagined that my public talks, lectures and books about Vipassana have been more or less the presentation of a relatively clear and simple narrative about a meditation practice and my personal experience of it. But in the context of larger audiences, stronger venues, and the monumental explosion of many kinds of meditation into Western culture, I now recognized that every presentation about meditation is directed at unique people, and is listened to by ears that are attached to heads full of ideas, critiques, and commentary. I was speaking in the middle of snowstorms.

In light of these differently tilted audiences I gave different talks, some of which were recorded, all of which lacked final texts. In this compilation that you are now reading, I have synthesized and overlapped them to create an introduction to Vipassana that is responsive to the current, marbled, environments within which it is being listened to. I suggest that this longer article is best read over several days rather than all at once. This document provides a richer and more layered texture than is permitted by a fifty-minute talk. I have preserved as my orienting point the title, "A Practical and Spiritual Path."

*****

A Classic Meditation

Today we have the same opportunity that legendary ancient people had to learn, practice, and live according to a classic meditation.

In this talk I will describe Vipassana meditation's signature features, its practical value, and its spiritual nature. I will try to explain why a person might choose to practice it, and also why someone else might choose not to practice it.

I will not discuss "meditation" as a generic. When I say, "meditation," it will simply be the short form for Vipassana meditation. I will discuss Vipassana exclusively, because it is the only meditation I know, and the only one I have practiced for over forty years. I can't compare Vipassana to other meditations like "mindfulness," because I have no personal knowledge about what "mindfulness" is when it becomes an isolated practice taken out of its original context. I would like to create an atmosphere in which the words "Vipassana" and "meditation" can be heard in a fresh way without reference to the media attention that has surrounded these or similar words. I will describe Vipassana as an activity that is not in competition, nor in a hierarchy with any other meditation.

I will start by giving a clear but brief definition to what I mean by Vipassana meditation. Then, over the course of the talk, I will expand that definition until it is full.

Vipassana:

- Is taught in ten-day residential courses -
- Is taught for free -
- Carefully references its historical and cultural context -
- Has goals of psychological development, specifically, peacefulness and generosity of spirit -
- Also contextualizes itself socially: it is intended to regenerate its own cultural milieu -
- Its focus is awareness of the arising and passing of one's own body sensations, in their variety and totality, over time -
- It has two objectives: neutral, non-judgmental, observation of sensations; and calm, acceptance, and non-reactivity towards them -
- It is a sustained practice of self-observation and inner peace -
- The practitioner gains skill in awareness and equanimity -

Please note the emphasis that I have given, that I hope will stand out in your mind, and may be provocative and especially interesting. In spite of the strong momentum with which meditation is being presented by its prominent representatives to the Western media as an activity that can be scientifically substantiated by neuro-imaging the brains of its practitioners, I will be saying something different. Of course, when people meditate, there must be some reorganization of their neural substrates, just as there must be when we read, study, sleep, or play baseball. But monitoring and measuring brain changes out of context will miss the point. When a person reads *Das Kapital, Mein Kampf, Moby Dick,* and *Peter Rabbit,* there are some shared changes in the neural substrate responsible for reading, but those changes are not sensitive to the content. Our subjective experience remains far beyond the reach of our neurological tools.

Rabindranath Tagore, India's first Nobel Prize winner for literature, presciently warned that when meditation would go to the West, it would be misunderstood as mechanical training of the brain.

Vipassana is best understood non-reductionistically. I hope this talk will encourage you to think of Vipassana as a complex network of interacting systems that include neural, psychological, social, historical, and cultural practices and values. That's right, values! This nest of forces engages an individual's full personality, with his strengths and weaknesses, and eases him into becoming, to a greater or lesser extent, a renewed center of a particular band of moods and feelings in himself and in the people around him.

If we think about meditation in this way, we can avoid two errors. We will immediately understand that meditation is a multi-dimensional, personal, biological, social and cultural experience. Secondly, we can avoid the error of imagining that meditation works with the precision of an assembly line. In fact, meditation works more

like a living ecosystem, in which the brew of components themselves interact and mutually influence each other, creating a mesh of mutually augmenting features.

I want to fulfill my meditation teacher's agenda, that meditation not be reduced to "a technique taught by a technician." I am going to emphasize meditation as a living, vibrating, personal experience.

Why Ten Days?

The first question that you have to ask about Vipassana is why it is taught in ten-day residential retreats, in silence and seclusion from home life. Why is an immersion experience necessary or even valuable? Today, in Europe and North America, meditation, or derivatives of it, are taught in ten minutes, or in a few hours, or during a weekend that does not cut off its students from daily life. Or, meditation may even be taught on smartphone apps like "Headspace." Yet, Vipassana students spend ten days of uninterrupted, dedicated time, that precludes reading, writing, telephoning, or talking to anyone other than the teachers or the managers of the retreat. There must be some compelling reasons to account for this worst marketing strategy ever designed. The answer has to be that Vipassana is not a marketable product, is not for sale, is un-sellable. Vipassana is not offered as a product and its motive forces are not commercial ones.

The ten days of the Vipassana course are designed for meditation with sustained effort, over long periods of time. The student practices perseverance in maintaining her neutral observation while she encounters various mental and physical conditions. During the ten-day course, we meditate early in the morning, late in the evening, when we feel wakeful or tired, when we feel hungry or full, when we feel bored or fascinated. This practice of meditating throughout the day, day after day, breaks through the assumption that meditation is any one thing, any fixed or static mental state. Instead, the ten-day course makes it obvious that meditation is a "meta-state." Meditation practiced in this way is a wide containing systems practice. It is dynamic and changing, not one thing, but a collection of many things held together in a more elastic and resilient psychological capacity.

Throughout all of its variety, Vipassana retains its core feature: the practitioner's sole effort is to observe real body sensations without reacting to them.

It is easy to see that meditation is an exercise that augments determination, will power, and tenacity of effort over time. When the Buddha taught meditation, he emphasized "diligence" as the cardinal virtue. Not coincidentally, modern Western psychology looks upon "conscientiousness" as the single best predictor of happiness and success in life.

Lately, *The New York Times* has given significant attention to the so-called "marshmallow test," promoted by psychologists at Stanford University, which purports to show the importance of a child's ability to delay gratification. The child who can forgo eating one marshmallow immediately in order to obtain two marshmallows later, is a child who wlll go on to have long-term success in school and life. Although these "marshmallow tests" have been criticized for their possible bias due to issues of culture or trust, it is nevertheless true that for most of us, most of the time, the "marshmallow test" measures an important capacity of our executive functioning, as controlled by our forebrain, which regulates impulsivity. The test taps into our ability to watch and wait, and to act only when we can optimize rewards. We can say that Vipassana is the ultimate Stanford marshmallow test for adults.

Instead of trying to control what happens, the Vipassana practitioner learns to regulate his or her own response, to adapt, vary effort, sensitive to the moods and mentations that involuntarily arise to the surface of the meditating mind. The practitioners' effort always remains observational non-reaction. The meditator positions herself like an eagle flying over the land, or like an observational satellite orbiting planet Earth.

Although the student is attempting to sit still peacefully, in fact a flood of mental states and contents wells up, and she learns to respond with the intention to reestablish acceptance, calm, equanimity, through observation without reaction. A meditation course often feels as much "stormy" as "peaceful." The student becomes a ship's captain, who attempts to stay on course through both calm and turbulent waters.

Please note an irony in what I am saying. The meditator's intention is to observe body sensations, but the reality of meditation occurs at the interconnection of mind and body. By observing the body, the other side of the coin is also revealed. By observing sensations, unintentional, mental life is lit up into awareness. As we will soon see in greater detail, the mind creates our "feelings" from within the concatenation of signals relayed from the body, so that sensations are one of the keys to our emotional life. In meditation, we learn to guide our mind back to mere somatic observation, and emotions are embedded in this activity.

So meditation is a re-learning, a de-conditioning of all those mental states that interfere with calm self-acceptance. Reactive mental states certainly arise, but through natural selection, based upon intention, they are allowed to pass away. Natural selection occurs for comfortable observation, and away from anxiety, anger, fear, "negativities," and "reactivity," because it is simply more beneficent for us to feel calm than to feel distressed. We settle into our optimal, alert, resting attention.

I am summarizing ten days of instructions, lectures, and practice, in one short talk. Therefore the student on a Vipassana course can expect a much more careful, step-

by-step, clarification, with graduated exercises, that start with simpler meditation based upon only sensations of breathing, and which build up to observation of sensations in the whole body.

But let's be very clear about the goals. Vipassana is aimed at the practice of self-containment, contentment, by observation of body-mind without reaction. So the ten days are immersive, deep, multi-faceted, a genuine journey through the winds, eddies, and islands of oneself, unbroken by contact with mundane preoccupations, worries, and escapes. The practice is based upon dedicated time and attention.

But now we need to ask, why this singular focus upon the body, when the mind and emotions are also so vital, valuable, and essential to Vipassana and to life?

Why "Sensations"?

The importance of using body sensations as the focus of meditative mindfulness is both convenient and essential. In the context of Vipassana, the term, "mindfulness," specifically refers to awareness of body sensations as they arise and pass away.

Regarding convenience, first, we can quickly see that our own body sensations provide us a unique, personal focus for our meditation. It is as if we are attending to our own DNA, the unique patina of us. We have already seen that the body is the gateway into the mind. But now let's make that point a little more emphatically. The body is the seat, the pre-condition of mind. It is in our bodies that our mind takes up residence, and by meditating on our body, the deep basin within which our mind is located also becomes our focus. Sensations R Us.

Another advantage to meditating on body sensations is that, generally speaking, our body is less well known to us than is our mind. The body is the locus of less conscious drives and forces, that nevertheless strongly influence us in our moment-to-moment living. These less conscious drives often determine directions that we take with our lives. Here I am referring to powerful somatic signals to which our minds are always subject, such as pain, sex, and the dissolution that we call aging and death. Meditation on body sensations provides a private, gradual entryway into the "dark side" of our being. Psychologically, we can say that the body contains aspects of ourselves that determine our nature, while at the same time we may be motivated to distance ourselves from them or deny them. Thus, strong signals from our body often constrain our choices though we have less conscious recognition of their origins. It is a skillful education to put ourselves in direct contact with the pre-verbal drives of embodied life. Our somatic being rises up into our full awareness, often like an unruly infant.

Now the things I have said so far about sensations I would categorize as the convenient utility of meditating upon them. Using sensations as our meditative focus

gives us an eye-opening awareness of new dimensions of our selves. As important as these convenient aspects are, they are dwarfed by the essential insights that are generated by meditation upon the arising and passing of body sensations, and in order to plumb the depths of these insights, we need to spend a few moments discussing what body sensations actually are.

The sensations of our body are all caused by the motions, signals, and responses, of the atomic, molecular, and cellular components that form us. We are made out of an aggregation of dynamically changing components, and it is the incessant change of everything within us that creates our world of sensations. The Buddha called the human being a compounded thing, and modern science emphatically agrees.

Our bodies are aggregates of four components: matter, energy, information, and disarray.

When our body takes shape in the uterus of our mother, matter and energy are packaged together according to certain information. A lot of our information is in the DNA that comes from our father and mother and that lives in all of our cells, and that provides instructions about how our body should run. But DNA is a large chemical, and therefore for it to do its job we must also contain the information by which chemistry organizes molecules out of atoms. The laws of the universe that we have labeled "chemistry," also dwell inside us and inform our being. And chemistry, in turn, rests upon the way that atoms create bonds, so that our bodies also contain the information of the universe that we call "physics." The laws that we have placed in conceptual compartments with names like "biology," "chemistry," and "physics," are all indwelling governors who regulate the atoms out of which we have been formed. We are a very large collection of moving, tiny parts, fluid and changing, following the laws of the universe that have formed us.

Today we call these laws "information." Along with biology, chemistry, and physics, which all cooperate to organize us, we also contain entropy, disarray. Even as we are being built up from atoms, we are also constantly disorganizing and decaying. Eventually, the continuous remodeling which keeps us going succumbs to the loss of information which we call decay, and eventuates in death. But as long as we persist, we consist of constant creation and destruction, incessant change, which is observable to us as our body sensations. We are arenas of creation, dissolution, change.

I have been describing to you an ultimate, biophysical cosmic truth that we can all observe (or partly observe) at the level of our own sensations. Even when we feel our socks itching our feet, or our behinds being crushed in the chair in this lecture hall, these ordinary, gross sensations are the product of changes in us, in our skin, in our sensory neurons, by which atoms and molecules are changing their location in order to relay information to our brain about what is going on in our feet or in our seat. Similarly, the

new ideas that enter your mind as you listen to a lecturer come from new organizations of atoms in the cells of your brain, and create new sensations on your body as you listen. Many of our sensations are products of easy to understand dramatic changes in our body, but many are products of subtle thoughts and feelings that also influence our physical state.

When we fully appreciate the pervasive reality of change in our selves we may accept (or partially accept) the reality that underlies our existence. Change lies within all things. There is no abiding self in our bodies or anywhere else. The term which the Buddha used when he awakened to these truths through Vipassana meditation was, "anicca," pervasive change in all compounded things.

It always gives me pause when I consider that the Buddha discovered and gave emphasis to entropy more than two thousand years before Western science did. Allegedly, his last words began, "All compounded things decay…"

Earlier, I mentioned that meditation needs to be understood not as a mental unit but as a large round corral holding many mental states within it. Now we can add that the perception of change is not a singular realization, but a common denominator to all perceptions of dynamism or alteration anywhere in the body and mind. Non-reactive observation enables us to gain this insight, and insight in turn feeds back into a more balanced world-view, so that awareness and equanimity reinforce each other. This is the heart of Vipassana meditation and its attendant way of life. I just want to pause for a moment and go a little further into a description of our bodies as collections of impermanent aggregates, because meditative experience and science fold into each other so supportively.

It's Not Corny to Say We Are the "World"

The Buddha said that each human body is "the world…" At first, this sounds mystical or metaphysical, but I hope I can clarify how literal and useful this point of view is.

When I referred to the atoms of our body, let's bring that back to a simpler word: food. How primitive we are! We are monsters who eat the cosmos. We chomp food, which means molecules and their component atoms, and reconfigure them into ourselves. We scarf the stuff of planet Earth and manufacture ourselves.

To appreciate who we are, we have to remember where the matter of planet Earth comes from. Our huge little Earth was formed along with our solar system from the activity of ancient stars and supernovae. Our planet is said to be four billion years old and its mother, probably a sun, was itself billions of years older than its child, our Earth. You may be familiar with Joni Mitchell's lyrics in "Woodstock": "We are stardust…" Every

atom in our body comes from the Earth, which came from the activity of stars that were born and died in cosmic events. Each one of us is the aftermath of a supernova. I like to remind myself and anyone who will listen to me that every one of our red blood cells contains cobalt (which is why we need to consume cobalt-containing Vitamin B12), and that cobalt had to have been manufactured in a supernova. (Cobalt's nucleus is too big to be formed by the pressures inside any star, and required the force of a supernova). We contain many billions of red blood cells and if we are smart, we eat B12 every day, and so it is that we are dining on and rearranging the blue jewels of supernovae and other unimaginably ancient, galactic events.

Our energy also comes from our food. But energy enters our bodies through Earth cycles in a different way than matter does. Our personal energy was donated to us by plants, who ate sunlight during photosynthesis, an amazing capture that transforms invisible energy into life. Plants store the sizzling energy they capture between two carbon atoms, in molecules like sugar, carbohydrates, and eventually proteins. Through this relay by plants, our energy comes from the Sun. So we are not only stardust, but we are also sunlight.

The energy inside us moves the matter of which we are made, and therefore is the source of our body sensations. Where did the Sun get the energy that we are now using? How can the Sun keep pouring energy into the black universe for billions of years?

As everyone now knows, one of the great revelations of twentieth-century science was that our Sun gets its energy by crushing the nuclei of hydrogen atoms into each other in hydrogen fusion. (The Sun is not a ball of fire). After hydrogen is fused together to form new elements like helium, some of the excess escapes as free energy, and this radiant out-pouring is called sunlight. So our own energy is transferred to us from inside the body of the Sun, from hydrogen nuclei that are congealed energy, that precipitated during the primitive early universe, just after the Big Bang. Let's never forget that when I move my arm on this stage from which I am talking to you, the energy for this motion came from food molecules, which were made by plants, which took their energy from sunlight, which came from hydrogen nuclei, which were made in the morning of time. We are all derived from the opening of existence. We all wave with the universe's energy. The sensations inside our bodies are powered by the energy that was released by the Big Bang, and which has been transformed many times in order to reach and empower us.

One of the most important insights of ancient India, where the Buddha first taught Vipassana meditation, was that the microcosm contains the macrocosm. Our sciences today have documented this truism in much more finely grained detail, but the truths that animate our focus on sensations in Vipassana meditation are ancient and modern.

Just to answer the question about why Vipassana meditation has us focus on sensations, we have had to refer to numerous sciences like biology, chemistry, physics,

astronomy, geomorphology, even hematology. Yet one more remarkable feature of our existence requires emphasis in order for us to see how it plays out in the context of our body sensations. We have to return to the observation that the universe is lawful. Whether you are the Buddha preaching a cause-and-effect "Dhamma," or Newton, Darwin or Einstein studying the predictable regularities of the world, or a meditator, some order is detectable within the complicated machinations of all things.

An educated guess is that we contain octillions of atoms zipping around inside our bodies, enough atoms in number to make an entire universe of stars. All of our dizzying magnitude of matter and energy needs to be organized. The great wonder of life is its organization. We are not a jumble, not a traffic jam, not an omelet. When we say that our sensations are caused by matter being moved around by energy, we have to quickly add that this movement is orchestrated by the wisdom inside of life. In the neutral phrasing of contemporary sciences, we say that we are a complex, physical-chemical-biological organization of information, but in the language of ancient India you could say that we are all vessels of "Dhamma." The universe is guided by laws and our body is guided by those same laws. Some of the information inside of us originated with the original information state of the Big Bang. Some of the information inside of us may be brand new. Yours or my DNA may contain creative mutations that have never before existed in the universe.

The universe not only expresses information but adds to it, and that new being is us. Our sensations are the products of matter being moved by energy, which is regulated by information, which is as old as the universe and as new as this moment.

At the pinnacle of creation we find awareness. We are able to experience ourselves. We do not merely exist but we reflect. This self-awareness creates in the universe a new kind of information in which the universe is observing itself.

When we meditate upon our sensations we are products of the universe aware of the universal processes. The mindfulness in our brains as we meditate is information that has emerged.

Through meditation on sensations, we have the opportunity to experience our "selves" in a fluid, connected, and evaporating way. We can recognize that we are *a temporary vortex of informatically driven matter and energy*. The arising and passing of matter and energy make the sensations of our bodies, and when we are observing this phenomena without editing it, and without reacting to it, we get a window into the ultimate reality of what we are.

It is because of our equanimity that we can have non-personalizing awareness. Our calm wisdom becomes an emergent domain within the universe itself. The universe comes to realize something about itself through our equanimous self-observation.

We are matter, energy, information, and decay, in incessant change, without any abiding self. This is the insight at the heart of Vipassana and is the teaching of the Buddha and the conclusion of science.

Mind is Always Translating Signals from the Whole Body

The awareness that is necessary for us to be able to meditate is a startling phenomenon. We don't know whether our awareness is an event, unique to planet Earth, or is duplicated elsewhere in the billions of galaxies that surround us.

As meditators, the important thing about our mind is the way that it interacts with our body sensations. Because Vipassana means, "mind observing sensations," we will want to understand why this self-observation, this awareness of sensation, is such a valuable psychological activity. We want to bring the cosmic laws, "the Dhamma," down into a more personal, helpful practice. We are observing sensations, but who are "we."? Who is "aware" of sensations, and why does this awareness either react, or learn to not react, to sensations? Is this whole process really helpful?

It is amazing to think about the fact that we are made by and dissolve back into the universe, but that insight is also abstract. Meditation brings it up close, makes it vivid and "in your face." Also, if I am so ephemeral, then why do I feel so solid?

I am going to paint a picture about how our minds create our sense of self by integrating our brain with the rest of our bodies. The process by which we create our sense of self can now be described in neuropsychological detail. Understanding this process scientifically may inspire our meditation, and meditation will make the science feel personal and real.

Antonio Damascio is a California-based cognitive neuro-scientist. In his books, like *Looking for Spinoza*, Damascio describes how the cortex of our brain designs "feelings." Our emotions are interpretations of sensations which are relayed to our cortex.

Regions of our cortex, (like the insula, or the ventromedial prefrontal cortex) receive input from our body and other parts of the nervous system. These cortical brain centers actively draw towards themselves sensory messages from many dimensions. Then, the cortical centers design a multi-dimensional portrait of the body's inner state. Cortical brain centers capture, reorganize, and integrate large amounts and different kinds of data from the body, and the data includes not only neurological information, but fleeting, molecular oscillations as well. The portrait that is creatively put together by the cortical centers becomes the basis for "feelings." According to Damascio, feelings are not replicas of anything. They always contain editing, interpretation of the messages that are being received from multiple somatic relay systems.

Feelings are interpretations of rich patterns of information that our bodies provide to us about our own inner states. Our sense of "self" and what we "feel" is synthesized, a creation, a composite based upon interpretations by the brain about what is going on in the rest of our mind and body. The mind, in general, whether meditating or not, is understood by cognitive neuroscientists to be the collated signals of the whole body. The whole body may contain a vast array of subtle, brief, local and "unconscious" chemical signals, and not just the messages that our consciousness makes us aware of. The collation of all this information, which we call mind, has the power to organize, summarize, add, and delete patterns and interpretations, so that our mind is always responsive and simultaneously creative.

The implication for us is that we are unique bodies, minds, histories, interpretations, and choices. Most of our emotions are sensations that have been tinted by perceptions. Our sense of self and its feelings and emotions are "kamma," or "karma," that is to say, our own "take" on things. We are partly realistic, and partly invented.

The mind is always translating the body.

Meditation is a set of mental activities that make these operations conscious. We now know that we are producers and directors of schema. We experience sensations, and we experience ourselves reacting to them. Our goal as meditators is to become more accurate and non-reactive observers who are less caught up in the drama.

The Sense of Self is Ephemeral and Useful

The Buddha taught that the sense of self is a fiction. His insight was that there is no enduring eternal self. Each individual is a transitory swirl of matter, energy and information doomed by entropy. Today's neuroscience is a long deferred echo of the Buddha's teaching. Through meditation, he understood mental activities that science is rediscovering 2500 years later.

The psychological value of understanding that our self is created and impermanent is to liberate us (or partly liberate us) from the suffering we cause ourselves by clinging to a passing thing. The idea that the self is fictional is not new even to the West. The Scottish enlightenment philosopher, David Hume, argued that our sense of self was simply a bundle of sensations. Unfortunately, this idea has come to be misunderstood by some Western psychologists. Our self is not an eternal soul that outlasts the entire cosmos as ancient religions taught, or still teach. But our psychological self is also an important component of daily function. We should not turn spiritual implications of a scientific truth into demeaning self aversion. Our creative brain designs our sense of self for very good reasons. The self is a fabrication and a very useful one.

Many articles in the Western press have confused the Buddha's idea of "anatta," the absence of an eternal soul, with the idea that meditation should rid you of your ordinary sense of self. Then the press has utilized neuropsychology to confirm this point. Psychologists like Bruce Hood, in his book, *The Self Illusion,* have encouraged people to look upon their sense of self as something to be discredited and abandoned.

All of this is dismaying to a psychiatrist who spent much of his professional life helping disorganized, fragile, and wavering people to develop a firm and coherent sense of self. Let me emphasize it in one clear sentence: our sense of self is a creation, an essential skill of our mind.

Our minds collect the information contained in our body sensations to fabricate an integrated and continuous identity. This gives us greater memory, consistency and flexibility - you could say "character" or "personality" - than we would have if we were limited to immediate reactivity.

There is an enormous difference between understanding that our self is created, versus devaluing it. After all, clothes, cars, and houses are created things, and we don't try to live without them. Our body is a created thing and we can't imagine trying to live without it. Our sense of self is an integrative, psychological system that we must have to live a focused, directed and self-consistent life. In the psychological sense, the Buddha had a powerful sense of self that gave him continuity and consistency across a lifetime of teaching and leadership.

There are many people who have difficulty creating a consistent, flexible, responsible internal executive. Their problems may be due to many reasons, either neurological and/or environmental. These neighbors and family members of ours suffer excessively, because they are unable to generate around themselves a world of goals, loves, people, and tasks. We should not weaken the executive function of confused people by implying that their psychologically constructed sense of self, which they need in order to function, should be abandoned, simply because all of their being is ultimately ephemeral.

When we absorb the wisdom of meditation, we see our selves as chimera, and when we take care of our daily business, we count on ourselves, to be effective, just as the Buddha was.

We are the world, using all the laws of science and running on the energy of the Big Bang. We are a fabrication, created by our brains as they integrate and portray ephemeral body sensations. And we are people, born to eat, meditate, make friends and hold jobs. All of these dimensions co:exist and express aspects of a bigger truth.

Meditation is Influenced by its Social Context

When we meditate, we feel we are alone with the sensations of our bodies and the thoughts inside our skulls. But, in fact, meditation is influenced by its context. We are not alone. The individual meditator has received instructions that came from teachers who in turn also had teachers. Everything that is taught and practiced under the heading of "meditation" is a particular way of proceeding that has been handed down to us by other people. Every tradition has had its origins, and historical influences. The individual meditator is sitting in a stream of behaviors, transmission and texts, as well as among contemporaries and their institutions. Even while we meditate, we are embedded in messages from the past and from surroundings. The meditator's social context is a synthesis made by other people, living and dead.

Meditation commences with the perceptual illusion that it is an individual act in the private spaces of body and mind, but it progresses to the recognition that we are participants.

Therefore, whenever we read articles about what happens in the brain of a meditator, we have to ask ourselves how the artificial setting of the laboratory where the study was done may have influenced the outcome of the data, and how the same meditator might have had different brain wave activity if he or she were meditating in a meditation hall, influenced by a completely different atmosphere than is found in a scientific lab. The social context of meditation may alter it. A person meditating at home may have a very different experience than when she is meditating as a subject in an experiment in a university. On even a larger scale, the beliefs, hopes, fears, and practices that a meditator brings to bear upon his meditation will bend and direct it.

We are considering how larger systems interact with individual units within them.

Culture influences the individual brain, and the individual brain influences culture. Meditation is learned and practiced in fields that it is influenced by and that it influences. The so-called biological brain-based effects of meditation occur in people who are absorbative, porous, social. We haven't created meditation, taught it to ourselves, written our own texts, or built our Centers alone. Mediators are always recipients, and the way we have taken meditation in will determine how it works.

In social psychology, it is said that all experiments are biased by the atmosphere in which they occur, and even by the expectations of the experimenter, who may be subtly and unintentionally influencing his or her subjects. The individual mind is partly a product of its environment, but a strongly trained mind itself becomes a force that shapes the environment around it. In real life situations, there is always a dialectic between the individual mind succumbing to its environment, and the social environment relenting to the force of the individual.

A Lifetime Experience

Let's pause for a moment. We have just considered three big steps. First we asked the question, why meditate for ten days, which we answered by explaining it as a deep, stirring experience. Next, we asked, why meditate on sensations, and the answer is that observing sensations without reaction or editing, is a doorway into deep scientific realities about our "self." Third, we took stock of how our brain uses body sensations to manufacture a psychological CEO to make us competent, and how that CEO gives us a porous and dynamic connection to our surroundings.

Meditation is a very rich brew, strong Assam tea, and no tea bag.

For most people, a ten-day course is hard, full of unexpected mental life, memories, thoughts, wishes and fears. Most people can only dimly glimpse their body sensations through the haze of thinking, worrying and fantasizing, until they have gained a bit of experience. The ten-day course is also a glimpse into ourselves as vessels of universal truths, a revolutionary insight that brings to life what we once learned as cold science. Almost every single participant feels that the hard work of sitting still with self-observation is a lifetime experience, a rich and uniquely rewarding time. Most people feel they have climbed a mountain inside themselves. Almost every one feels they have gotten a whole array of benefits: effortful perseverance across time; expanded self-knowledge; deepened self-integration; heightened observing skills; new levels of somatic awareness, improved equanimity; and direct experiential awareness of the scientific world view in the microcosm of the self. All of these form a palette of practical rewards. In addition, we learn detachment from temporary states, and the relatively increased ability to observe all mental and physical transformations as impermanent, and not truly our "selves."

Vipassana is Not for Everyone

If you are a responsible hiking guide, you inform potential participants before the hike begins about its length, steepness, altitude change, and other difficulties, as well as extolling its aesthetic and fitness rewards. Vipassana also is a rigorous experience, which is not suitable for everyone.

Some of the difficulties that students may encounter are intrinsic to the ten days themselves. Not everyone feels comfortable leaving his or her familiar circumstances, or spending ten days inside one's own mind for long hours of silence. All new learning involves some frustration, and not everyone wants to make the effort to undo the habit patterns of the past, and to overcome the obstacles of engaging a new mental life.

Joining a residential retreat entails some loss of control over one's timetable or diet. Vipassana Centers are free of alcohol, tobacco, and meat.

Another difficulty with the ten-day retreat is that it removes our ability to distract ourselves from our internal discomfort. In ordinary life, every one of us has thrown up an array of distracting activities, which serve as externalizing aids of inhibitory neurology, meaning, that distractions help us to shut down certain parts of our nervous system. The simple way of saying all of this is that healthy life includes some avoidance. However, during the ten days of meditation, these skillful, but limiting, psychological strategies are lifted. For most people, this facilitates the deep emotional and psychological experience that is the treasure of the course. But for some people, once the inhibitory distractions have been lifted, because there is no opportunity to read, or to watch TV, or to telephone a friend, they find difficulty shutting down. If you have a past history of your mind running out of control with excitement, depression, anxiety, or delusion, there is no reason to subject yourself to more of that during ten days of silence. The flood of thoughts, daydreams, sensations, and mind-movies, can be overwhelming unless there is also an accompanying capacity to return to focus, contain thinking, re-integrate, assimilate this train of new and florid mental contents. Particularly in the early learning stages, the partly learned, partly digested practice, may not be adequate for some people to cope with the absence of their habitual external organization. Then again, many people learn to become more focused and to contain their "monkey minds," without depending upon distractions.

Vipassana Meditation Centers can provide you help with your application, deciding whether you are likely to benefit from the ten-day course or not.

There has been a recent spate of publicity, arising as a predictable backlash to the wild proliferation of meditation-like practices taught by barely trained people, in which critics have accumulated reports of negative experiences. Some researchers have claimed that troubling reactions from meditation constitute a "dark night of the soul," as if the psychological troubles encountered by those participants consist of unique mental events that need religious terms and exotic understanding.

I am glad to see alert journalists, psychologists and teachers sound a warning about naive and unskilled tinkering in the name of meditation. Meditation today has been popped out of its context, commercialized and marketed with fadish enthusiasm and little care for its impact.

I don't think that we need to fabricate new diseases or mental stages under new nomenclature, in order to understand these problems. Meditation ought to be taught by people trained and steeped in their own practice during decades. Decades. Prospective students should have a clear understanding of what they are choosing, and helpful assessment of their suitability. Applicants should understand that when they are told not to meditate they have not been "rejected," but have received a careful teacher's guidance. And we all need to keep in mind that all of us, all of the time, to some greater or lesser

degree, are subject to our common human frailties of anxiety, depression, panic, and other forms of mental suffering. That's why we seek out meditation in the first place. Meditation does not cause all of the anxiety, confusion, or "dark night" that occurs in the lives of people who have meditated, because those people have had many other influences upon them before and after they meditated, such as their genes, family, religion, school, etc. I have never met anyone who hasn't had a dark night, and this is not caused by nor unique to meditation. We do not need to ignore centuries of psychology and psychiatry, and then reinvent them, to understand why meditation is properly taught with prudence, respect, training and tradition.

Vipassana should also be practiced in an atmosphere that is free of exaggerated claims for medical cure or radical personality transplant. One of the foundation blocks of meditation as a way of life is that it does not become misdirected towards limited goals. Vipassana is not a substitute for treatment of any kind. It is not a cure, nor a preventative for mental or physical disorders. No one can be cured of all disease, and any activity that is focused on cure loses the broad perspective that animates Vipassana, which is a lifelong, spiritual path, and not merely to eliminate disease.

Vipassana can only change what is changeable. No one can be transformed beyond the elasticity permitted at their birth. No batting practice makes everyone Babe Ruth. No education makes everyone Einstein. Valid educational institutions offer improvement but not magical exit from personal limitations. The Buddha didn't guarantee to everyone freedom from suffering, because he felt that "those who understand are hard to find," and he was "not concerned with whether the entire world will be emancipated." He taught those he could, those who were able and ready. Every rational educator is guided by "modesty in our claims, caution in our assertions." According to the Buddha's teaching, a student's progress is influenced by current factors like proper teaching, clear understanding, and diligent effort, but we are all also products of our past "kamma," and not everyone is "ripened" to the same degree. Today we say that genes and environment provide us opportunities, constraints and limits.

Vipassana can also become misdirected when its participants begin to over-emphasize the supposed attainments of deceased, legendary, or extreme meditators. Such an emphasis undercuts the real progress, and the real limits, that meditation brings to the lives of real people. Very exceptional people are exceptions. People who attain great wisdom do so on the combination of effort and talent - you could say, "a long chain of rebirths," because that is the way the Buddha phrased it to explain the wide variation in longterm results from a life built around meditation. To understand best what meditation can or can't do, each person should assess her own experience.

Warming Fellowship of the Seekers of the Truth

There is a widely quoted aphorism that appears repeatedly, for emphasis, in the ancient Indian texts, in which the Buddha says that friendship on the Path is not an important part of it; it is the whole Path.

This reminds me of a beautiful quote from a college teacher of mine. Gilbert White was a Quaker pacifist hero, and also a prominent scientist of natural resources management. When he was a young man, Gilbert left a safe, elite job in Franklin Delano Roosevelt's White House during World War II, to illegally penetrate Vichy France and join other Quakers in rescuing war orphans. He was eventually captured by the SS and suffered starvation and extreme personal hardship. Late in life, as a college president and an eminent professor, he was asked why he had once voluntarily risked his life in such a courageous and noble way. He replied that truth is difficult to define, and the long term effect of any good deed is hard to trace, so that the only reliable guidance he could find in life was the "warming fellowship of seekers of truth." Some thirty yeas after WWII, Gilbert quit another plum job, this time his tenured professorship at the University of Chicago, to protest the administration's crackdown on student protests against the Vietnam War. He was re-hired by the University of Colorado's Natural Hazards Center, and stayed there until his death at nearly 100. (His biography is by Robert E. Hinshaw). I remember him as an Elder of the 57th Street Meeting of Friends in Chicago, a professor of rational decision making in environmental problems, and a convener of the first anti-war teach-in I attended in 1967.

Not everyone can be as brilliant, daring, and maybe even as lucky to survive as Gilbert White was. But his story reminds us that even he counted upon others to light his way. The Buddha also is described as following teachers and companions, then distancing himself from them to pursue his breakthrough into unshakeable deliverance from suffering, and then immediately rejoining friends and organizing them into community, or "sangha."

The presentation in the Western media of meditation as something you do on your own to improve your health by putting your nervous system through a tune-up misses this essential ingredient. Vipassana is individual effort poured back into social connections. It is a way of life. Our personal efforts are drops in a river, books in a library, messages within and dependent upon the internet. Meditation is always embedded and contextual. Its social components, its friendships, are the whole Path.

That said, meditation should not be misperceived in the other direction as the nucleus of a new sectarianism. Meditation is a life of witness to universal values of self-reflection, self-knowledge, self-containment, self-responsibility. Friendships on the Path are loosely woven, volunteer communities that cohere around practicing, preserving, and

relaying the meditative way of life. All healthy human groups combine individualistic integrity alongside of shared goals and practices.

Now we can easily see why Vipassana meditation has to be for free. The absence of fee is essential to the way that meditation works.

The word, “Vipassana” means meditation on reality. The word was coined by the Buddha and appears in the two thousand five hundred year old Buddhist Suttas. So Vipassana is free because the Buddha taught it for free. It was inconceivable to Teachers of ancient India that anyone would charge for meditation. Vipassana was understood as a person-to-person gift. For two thousand five hundred years it has passed on its own, down through the centuries like a powerful “meme,” a form of thought and feeling that moves from person-to-person over time, the way information in DNA passes from body to body across the generations. Vipassana is an information state, formatted for free, a public service website with no cost to access. For two thousand five hundred years, people have been able to download for free the Vipassana app.

Like a stone thrown in water, Vipassana ripples out into friendship and community. Like a dinner cooked for you at your friend’s house, you turn around and invite them to yours. This is the warming fellowship.

Vipassana travels between people and across generations on wavelengths of friendship and generosity, that then take up residence in the recipients and activates transmission towards the next recipient. This atmosphere isn’t part of the Path, it is the Path. Commercial meditation lacks this mood of free receipt, gratitude, and free transmission. It misses the point.

This warmth of transmission was called “Metta,” by the Buddha, the attitude of loving-kindness. Metta is the glue, the equivalent of social electromagnetism, that holds together the Vipassana community. The ability to feel and convey warmth of Metta is one of the key attainments of Vipassana practice.

The keystone friend that I have had on the Path of Vipassana was Mr. S.N. Goenka, a remarkable man, who spread meditation from its obscure roots in Burma (now Myanmar) and lassoed the world with it. Mr. Goenka was a whirlwind of devotion for decades, traveling year after year, conducting hundreds of meditation courses. He swept along on top of the wave of globalization and jet travel that brought so many Buddhist practices to the West. He recorded many hours of teaching materials that form the ten-day courses, and longer courses. He organized the administration that runs approximately 150 meditation centers located in every major country of the world. Before he died in 2013, his teaching had reached over one million students. Along with being my teacher, Mr. Goenka was my benevolent friend as he also was to a worldwide communion of his students. He created a living community in which individuals befriended each other, and

so he left behind him people who belong to each other. Along side of his energy, devotion, knowledge about the Buddha's words, and organizational ability, he had the gift of friendship. His richest dispensation was the ongoing wave of Metta, this community without walls.

Those of you who have studied psychology might pause for a moment and remember how the classic studies of Harry Harlow in Wisconsin, and John Bowlby in England, confirmed that parents' warmth embracing us in our childhood is the precondition for our health and sanity. The continuity of secure connection was built into the Path by the Buddha's emphasis.

The friendship of Vipassana is a take-it-as-you-like participation in group sittings, courses, managing or serving as a volunteer on courses that other people are taking, helping to run Centers, and other activities. There is no formal way to be a member. There are no cards, dues, or organized religion. Mr. Goenka emphasized: "The noble truth of Dhamma is always free of sectarianism." The Buddha taught Vipassana to his friends two thousand five hundred years ago, and so it has circulated on currents and eddies down to us, the Buddha's long lost friends.

The Wakeful Way

Trying to learn meditation without its historical context would be like trying to understand American history without referring to Washington and Jefferson. At the same time, meditation is not Buddhism, as I will describe in some detail in a few moments. Meditation has a long and distinguished history, respect for which is part of meditation itself, in the same way that respect for the constitution is part of being American.

No one meditates all the time. When you get up, and resume living, the ethical assumptions of the Vipassana worldview are what keep your meditation rolling down the Path. For meditation to take root in your life, you need momentum. The word, "Path" means an all day, every day involvement. Meditation is not a mere after-thought, a way to reduce stress that you have already created. It is doing your best to be consistently considerate and at ease. You seat yourself in the inner tube of awareness and peace before you swirl on down the river.

The inner tube of Vipassana that keeps you afloat is the ring of five vows: not to kill, steal, lie, commit sexual misconduct, or use intoxicants. These vows are not archaic, and I would like you to feel their life-giving power and their common sense.

- "Not to kill," means respect for life, compassion towards all, give the spiders in your kitchen a break. For some people this means vegetarianism, but that is only one possible interpretation of "not to kill." In each case, these vows leave some room for personal interpretation. After all, they are yours to take and no one is

watching or monitoring you. I would like to point out that the personal resolution, "not to kill," is not the same thing as prescribing political pacifism to others. The Buddha should not be confused with Gandhi. It comes as a surprise to many people that the Buddha was not a pacifist. Vipassana meditation is not a prescription to avoid complex solutions to very complicated geo-political problems. Just because you have become a meditator does not give you superiority to suffering people who behave desperately in the context of terrible turmoil. Meditation does not make us experts on how to solve other people's agony. In America, much of what passes for "Buddhist Pacificism" is the satisfaction of good-hearted people luckily embedded inside safe conditions. I have written about this in a small book called, *The Buddha Taught Nonviolence, not Pacifism.*

- "Not to take what belongs to others": this is thought provoking, particularly with the global concern with income inequality. It means, "Don't steal."
- "Not to lie, exaggerate, hide": I would love to give a 45 minute lecture on my struggle to live according to right speech, as a husband, father, friend, and doctor. On the one hand, honesty does not mean blurting out your thoughts and feelings in impulsive, and reckless insensitivity to the needs and feelings of other people. On the other hand, when, where, and in what manner we speak our personal truths seems to me to be a delicate and difficult art. For me this unsettling problem is epitomized by the question about how a psychiatrist informs the parents of a college freshman that their son is not simply anxious about school, but has had a psychotic break that requires rigorous treatment, which in turn is only sometimes effective. Honesty, meaning not to lie, exaggerate or hide, is a balance that involves courage, timing, phrasing, and compassion. There has been no day in which I have completed it or done it very well. The commitment to verbal honesty is a gift and a burden. This reminds me to say that the five vows are tools for self-development, and not impositions by some outside authority.
- "Sexual misconduct": sex can be part of, and limited to, enduring and sustaining life-long loves. The up and down emotional escalators of convenient sex can't possibly contribute to your meditation goal of equanimity. If you are focusing your life on meditation, let sex guide you to loving partnership. For a few self-selected people, celibacy provides the freedom for a full-time commitment to meditation.
- "Not to take intoxicants": refers to alcohol and recreational drugs. Meditation means to cultivate an alert, clear, receptive mind. Of course, prescribed medications may become necessary. Otherwise, don't blurr your precious brain.

In case you think that morality is somewhat quaint and incidental, Nina Strohminger and colleagues at the Yale School of Management have shown that our moral style is the most central feature of our identity, even more so than our memory of who we are! Demented patients feel "themselves" as long as their moral style remains intact, even if their memory is shot, but not so the other way around.

A Complex, Self-Interacting System

Now I would like to encircle the main feature of Vipassana that I have been trying to put together throughout this talk. I hope that you have come to understand meditation as a nest of self-reinforcing, self-augmenting feedback loops involving multiple layers of human activity, starting with individual effort but sweeping up values, relationships, history, tradition and contemporary institutions.

To understand Vipassana you need to take into account its historical origins with the Buddha within the culture of ancient India, its long preservation through practice and free distribution, its moral vows and values, its meditation centers, and its people. In the end, its always about people.

One of Mr. Goenka's most important contributions was his ability to nurture a whole generation of teachers, leaders, and elders who, like Mr. Goenka himself, poured their life energy into living and transmitting the practice. He inspired and guided deeply committed men and women to understand themselves as lifelong facilitators of the always newly arriving students. Of course, the teachers who he left behind after his death also had to embody and replicate the rules that make courses and communities cohere. The teachers he trained are exemplars and executives. Vipassana teachers should be understood as ordinary people who benefited from a long immersion in the practice and the Path. I myself have found inspiration, comfort, guidance, and warmth emanating from these steady, quietly eminent friends. I imagine a few of them are the wisdom towards which they have been oriented.

Because every individual meditator participates in a larger, older, wider Path, he or she may be spun up to higher personal function, like electrons in an atom, that gain new properties when their resting state is charged with new energy. When we recognize meditation as embedded in a stream of time, it gains dimensions that it lacked when it was seen through the lenses of individualism and privacy. We flow and steer within a powerful river of history.

There is a common property in nature, that the whole is often greater than the sum of its parts. The Noble Prize winning physicist, Philip Anderson, called it, "More is different." Rich complexes gain properties that exceed the addition of all their parts, which interact and influence each other in rapid mutual augmentation. The spinning whole gains properties that none of its parts possess on their own.

Our brain, that does so many things, like receiving the input of our sensations, constructing a portrait of ourself, generating thoughts, plans, fears, and insights, may be more than the sum of connections between its trillions of neurons. Our bodies and ourselves are so complex that they may become more and different than their component

atoms, cells, neurons, and messenger molecules. Our personalities may well be able to spin at different frequencies, some of which require the Path to bring them into view. Meditation arises out of and regenerates a complex interacting whole, a Path, in which more may become different, and new human dimensions may emerge in those of us who participate. Meditators are ordinary people who become more, and different, through immersion in a rich psychological and social system.

David McCormick is a distinguished psychologist and neuroscientist at Yale, who has studied how cells in the nervous system sometimes synchronize into larger wholes. These large cell clusters become like temporary brain structures, even though no structure is actually present. McCormick has located rhythmic electrical fields in groups of neurons, that all surge together in the same way. This may be one of the underlying secrets of sleep: uniform patterns of cellular action that sweep over and control the cortex for a period of time. Dr. McCormick is also interested in meditation, another activity that appears to involve a cellular synchrony. Meditation may entrain our neurons, our brains, our personalities into new self-perpetuating frequencies.

One of these frequencies may be what is called wisdom.

Dr. Dilip Jeste is a proponent of “positive psychiatry,” that emphasizes the capacities of repair, regeneration, and growth. Jeste and his colleagues have culled the voluminous research on wisdom to sift out its essential properties, to see whether wisdom can be uploaded into psychiatric healing. It turns out that wisdom may not be a collection of isolated entities, but may be understood as a complex reorganization, a new state of being, a higher order. It is not just new but different. In general, whether thinking about wisdom or other capacities, neuroscientists have shifted their research away from single areas of the brain, and are trying to study networks, connections, and rhythms.

How does wisdom appear from the standpoint of meditation? In Vipassana, wisdom is understood as realization of impermanence and activation of equanimity and compassion. Wisdom is considered to be the cessation of clinging to the impermanent body and its sensations, along with liberation into peace and social gift-giving. Possibly the path of Vipassana leads to a shift among ordering principles of personality, activating more generalized interconnections within the whole brain. This provides us one way to think about traditional concepts like “liberation,” and “enlightenment.” New sweeping synchronies of brain cells may lead to new organizations of personality, which emerge into our lives as peace and service.

But if meditation really does alter neurological systems, that only has value if it shows up as better lives. It is the people, and not their brains, who will be the lighthouses of Dhamma.

Yale's Dr. McCormick has come up with a different image to describe sweeping changes in brain states. He calls them "the roar of the crowd." All the fans in the stadium cheer at a critical moment, and an astonishing unity and volume of noise is blasted out. Sustained meditation practice may lead to a cheering roar within our nervous system. It is not coincidental that the Buddha's teaching was referred to in ancient Indian texts as "The Lion's Roar." The harmony we feel from meditation may derive from webs of neurons enlisted to sway together in a tide. Equanimity from meditation may be a kind of psychic cheer.

By coincidence, on the morning of my talk in the Sterling Hall of Medicine at Yale, January 19th, 2015, a Facebook post claimed that in the football game between the Green Bay Packers and the Seattle Seahawks, which was a play-off to determine which team would get a chance to play in the Super Bowl, the score was tied at the end of the fourth quarter and the game went into sudden death overtime. A whole season of effort now balanced on any play at any second. The Seahawk's young quarterback, Russell Wilson, threw a 35 yard touchdown pass to Jermaine Kearse, a favorite son, born and raised in the Seattle area, to win the game and the season. According to this Facebook post, the roar that went up from the stadium in Seattle created a similar seismic measurement at the University of Washington's geology laboratory as an earthquake.

Both cells and people can engage in coordinated activity in which they retain their individuality yet roar in unison. You cannot understand meditation as individual healing without taking into account "The Lion's Roar."

I hope I have created a picture of a nest of loops that draw together individual brains, people of the past, people of the present, and people of the future. Vipassana is a meditation, a Path, a community, a tradition, an atmosphere, a "roar of the crowd" of people, places, and things.

Not Buddhist

Finally, we should reiterate an important emphasis that Mr. Goenka gave to his teaching, that Vipassana meditation is not Buddhism. Buddhism is a vast literature of beliefs, and a hundreds- million-fold populous, with various practices and rituals which Vipassana does not require. Nevertheless, an ongoing psychosocial institution, like Vipassana, cannot be fully appreciated if it is ripped out of its origins and presented to future generations in a sterile and de-contextualized manner. So there is a balance.

Vipassana wouldn't even have existed without the Buddha, who founded this practice and pointed to its essential rules and realizations. All things are impermanent and all attachments bring loss. Freedom from attachment can bring increasing loft to life. The feeling of loving-kindness is always accompanied by well-being and creates a better world. Whether he is understood as legend or as history, Buddha is the personification of

someone who embodied this wisdom. He is the pole star of the practice: perfect freedom from suffering due to attachment, and perfectly unshakeable deliverance.

The Buddha's teaching is soaked in self-transcendence, and compassion for those who are still suffering. So the Path is preserved, as we have seen, partly to serve our own personal meditation, and partly to help other, up-coming meditators. This social consciousness of the Path also includes gratitude and reverence. When the Buddha was asked what his followers should revere on the Path, he did not extol himself. He pointed out reverence towards "Dhamma," the laws of the universe, deep insight into which leads to liberation from suffering.

Imagine yourself for a moment meditating twice a day every day, and receiving directly from your own body and mind the wisdom of impermanence and detachment, which pulse within you and reset the atomic clock of your being every morning and evening. Imagine yourself anchored by sobriety and kind intentions, even if you often fail to implement them. Imagine yourself attending an annual meditation course, and from time to time meeting old friends at group sittings or other meditation-oriented events. Imagine a life that is compatible with the ultimate reality of the world as we know it, that we are insignificant, passing clouds in a multi-galactic universe, while at the same time we contain and express all the laws of the universe, holding seeds of truth within us. Wouldn't it be smart to create a life as harmonious and reverential as possible within the vicissitudes that distract and beset us? The meditative life of relative calm and reason is available to you right now. This is the Path which does not require Buddhism, but which follows the trail left by the Buddha.

Many people today cannot recognize reality as we know it within the portrayals found in ancient texts. We need to refer to science and non-sectarianism to find valuable guidance. The Buddha's words seem credible to us only to the extent that we experience them as real and relevant. The Buddha becomes our teacher only to the extent that our Vipassana practice makes him so.

I Would Like to Say

I would like to say that I have lived an ordinary life as a doctor, husband, father, writer, and friend. In addition, I have walked the Path of Vipassana, slowly but steadily, undistinguished among my peers in the Vipassana community.

Vipassana has never been the whole of my life, as if it were a confining sectarianism or religion. As I look back on my 70 years, I see my life nested in layers, and I still feel grateful to my ancestors, who crossed the ocean so that I could live in freedom; my college professors, who opened and complexified my world view; my parents, who set me on a path of conscientiousness and competence; my wife, who filled my world with flowers and friendship; the American rebels in music and literature, who

showed me optimism, “somewhere, so high above this wall;” and many more predecessors, and elders embedded as voices in books or throbbing out from the universe itself, like wood thrushes on a summer night, with their songs of emergence and joy that are older than any book. Humans were naked and in unsewn fur when hermit thrushes were already singing together. Evolution took nearly four billion years to make a man and a woman. I have been uplifted and guided by more sources than I can understand.

Vipassana has been my companion and my strength as I have crossed the difficulties that attend to any life. It has also been a beacon that has guided me higher rather than merely forward. In my early adulthood it helped me to set the direction that I followed for the rest of my life. In my middle years of adulthood, it helped me to hold a steady course among the demands, stresses, and tensions that attend upon professionals, parents, and householders. In the later years of my life, it has given me strength to face the decline that accompanies entropy and the decay of all compounded things. It has been a key player in my ability to see my life every day as an apple hanging for a season on a bough in time. It has also guided me to many uplifting and companionable people and situations. I particularly treasure the longer courses I sat in India, the courses Susan and I conducted in Israel and South Africa, some self courses I sat in my cabin in the woods, and the many people who I have gotten to know before or after courses, at group sittings, on my outreach trips, or at work-weeks pruning apple boughs at Centers. It has threaded me on a string that reaches backward to the Buddha and forward towards the unknown.

Paul R. Fleischman M.D. is the author of *Wonder: When and Why the World Appears Radiant,* and many other books. He has been honored by the American Psychiatric Association for his unique contribution to the study of psychiatry and religion.

Cover art by Michael Queenland, Yale School of Art